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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,721	12/04/2003	Richard M. Ehrlich	PANAP-1123US0	6910
23910	7590	05/16/2006	EXAMINER	
FLIESLER MEYER, LLP FOUR EMBARCADERO CENTER SUITE 400 SAN FRANCISCO, CA 94111			KO, DANIEL BOKMIN	
			ART UNIT	PAPER NUMBER
			2189	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/727,721	Applicant(s) EHRlich, RICHARD M.	
	Examiner Daniel B. Ko	Art Unit 2189	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to the application filed on 12/04/2003. Claims 1-9 have been submitted for examination.

Specification

The cross reference to related application of the disclosure is objected to because of missing U.S. Patent Application Number. Please provide U.S. Patent Application No. of all the related applications.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3, 5, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoskins (U.S. Patent 6,789,132 B2).

Regarding claim 1, Hoskins teaches a system for providing critical data in a hard drive, comprising:

a rotatable medium capable of storing information written to the rotatable medium (Fig. 1, Discs 108; column 4, lines 53-55);

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a read element capable of reading information from the rotatable medium (Fig. 1, actuator assembly 110; column 4, lines 55-58); and

a control mechanism adapted to receive data from and transmit data to a host device, control the rotatable medium, and position the read element over the rotatable medium (Fig. 1, voice coil motor 124; Fig. 2, disc drive control module 202; column 4, lines 66-67; column 5, lines 1-4; column 6, lines 17-40), the control mechanism configured to:

receive a signal indicating a critical event has occurred (column 7, lines 54-63);

receive critical data read from the rotatable medium by the read element (column 7, lines 7-9; column 30, lines 1-5);

receive a critical data request signal from the host device (column 11, lines 46-53); and

provide the critical data to the host device (column 6, lines 8-14).

Regarding claims 2 and 3, Hoskins teaches a system wherein the critical event is host or hard drive boot-up (column 11, lines 13-16, it is clear that host must boot-up in order to start the system).

Regarding claim 5, Hoskins teaches a system further comprising: a processor configured to identify the critical data likely to be requested (column 11, lines 16-35).

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Regarding claim 9, Hoskins teaches a system, wherein identifying the critical data further includes: receiving a vendor unique command from the host device; and identifying the critical data to be data specified in the vendor unique command (column 6, lines 29-40).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
2. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoskins (U.S. Patent 6,789,132 B2), in view of Sukegawa (US Patent 5,860,083).

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Regarding claim 4, Hoskins teaches the limitations of these claims as set forth for claims 1-3 and 5, above. However, Hoskins does not teach a flash memory that contains data.

Sukegawa teaches a flash memory that contains data (Fig. 1, Flash Memory Unit 1; column 2, lines 53-64). At the time of invention it would have been obvious to a person of ordinary skill in the art to combine the Hoskins with Sukegawa. The motivation for doing so would have been the retention of cache memory when the power is off because flash memory is a non-volatile memory that has a higher access speed than the HDD (column 1, lines 50-61).

Regarding claim 6, Sukegawa teaches a system, wherein identify the critical data includes: record past data requests associated with past occurrences of the critical event; and identify the critical data from the past data requests (Fig. 1, Flash Memory Unit 1; column 2, lines 53-64; Flash memory unit contains non-volatile cache area 10c that contains past data request).

3. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoskins (U.S. Patent 6,789,132 B2), and Sukegawa (US Patent 5,860,083) and further in view of Freimuth et al. (US Patent 6,968,358 B2), hereinafter simply Freimuth.

Regarding claims 7 and 8, Hoskins in view of Sukegawa teach the limitations of these claims as set forth for claims 1, 5 and 6, above. However, Hoskins in view of

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Sukegawa do not teach identifying the critical data to be most recent data or most often used data.

Freimuth teaches identifying the critical data to be most recent data and most often used data (column 9, lines 61-67; column 10, lines 1-2). At the time of invention it would have been obvious to a person of ordinary skill in the art to combine the Hoskins and Sukegawa with Freimuth. The motivation for doing so would have been a flexible retention policy of buffer memory (column 9, lines 61-67; column 10, lines 1-2) based on the system.

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Conclusion

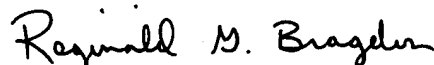
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel B. Ko whose telephone number is 571-272-8194.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald G. Bragdon can be reached on 571-272-4204. The fax phone number for the organization where this application or proceeding is assigned is 703-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel B. Ko
AU 2189



REGINALD G. BRAGDON
PRIMARY EXAMINER